Education strategies in dialysis centers associated with increased transplant wait-listing

Annual Dialysis Conference
February 11, 2020
About your speaker

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- Served as a consultant for Dr. Waterman’s Research Lab at UCLA
- Co-Creator of the Explore Transplant Dialysis Provider Training at WUSM
- Taught over 100 Explore Transplant trainings
- Used Explore Transplant directly with over 300 patients
- Previously Divisional Lead Social Worker at DaVita
- Nephrology social worker since 1996
- Past Co-chair of CNSW of Eastern MO & Metro East
Christina Goalby states that she oversees the trainings and distribution of the transplant education products, Explore Transplant and Explore Living Donation, which have been licensed to Health Literacy Media (HLM), a Missouri nonprofit with whom she is employed.
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Racial disparities in transplant

Compared to Whites, Blacks:

- Are 3 times more likely to develop ESRD
- Wait 60% longer on the wait-list
- Are 40% less likely to receive a transplant

USRDS (2015)
Racial disparities in transplant

Compared to Non-Hispanics, Hispanics

- Are 1.5 times more likely to develop ESRD
- Wait 27% longer on the wait-list
- Are 11% less likely to receive a transplant

USRDS (2015)
Additional disparities in transplant

Socioeconomic and psychosocial characteristics associated with lower likelihood of transplants

- No private insurance **
- Could only live < 2mo without current income
- High school or less education
- No access to a vehicle **

77.0% Black
35.0% White
54.0% Black
39.0% White
49.0% Black
33.0% White
41.0% Black
42.0% White

*p<0.05; **p<0.001

References:
Center-level barriers to transplant

A study conducted in our ESRD Network of transplant education practices in dialysis centers showed that **77% of centers informed patients about transplant**².

However:

- Providers spend little time providing transplant education to patients³
- Less than half of dialysis patients receive comprehensive discussions or counseling about the risks and benefits of transplant⁴

Other barriers include

- Lack of formal education programs or availability of education to share with potential living donors
- Lack of administrator support for transplant education practices used by staff

Case study:

**Purpose**

Understand how to help dialysis educators be more effective at increasing transplant wait-listing rates for their interested patients

**Study aims**

1. Identify common transplant education practices and barriers to education among dialysis facilities
2. Examine which transplant education practices were associated with increased transplant wait-listing rates at dialysis centers
Case study:

Methods

Data collected at 78 kidney transplant education trainings throughout USA

Participants

1,694 dialysis centers were surveyed pre and post training:

- United States Renal Data Systems (USRDS) used to characterize dialysis centers, patient population and to calculate wait-listing rates
- US Census data used to determine patient median income and insurance status
- Rural Health Research Centers’ Rural Urban Community Areas (RUCA) data used to characterize rural versus urban centers
Case study:

Survey questions

Surveys were designed to assess:

- Pre/post provider characteristics, including title and years of experience
- 12 different educational strategies, divided into 4 subcategories
  - Oral recommendations
  - Print education & information
  - In-center patient discussions
  - Intensive education
- 8 possible educational barriers
- Knowledge about transplant & living donation

\(^1\)Used with at least 5 patients in the last 12 months
Case study:

1,694 unique dialysis centers surveyed each had a single transplant educator representatives

- Social workers (56%)
- Nurses/Nurse Managers (23%)
- Technicians (10%)
- Dietitians (7%)
- Other/Unknown (5.2%)
Case study:

Results

- Oral recommendations (50%)
- In-center patient discussions (30%)
- Written education materials (17%)
- Intensive education (3%)

Educational practices

1 Used with at least 5 patients in the last 12 months
Results

<table>
<thead>
<tr>
<th>Educational practices</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommend evaluation for transplant</td>
<td>84</td>
</tr>
<tr>
<td>Recommend patients learn more about transplant</td>
<td>83</td>
</tr>
<tr>
<td>Provide handout about transplant</td>
<td>61</td>
</tr>
<tr>
<td>Referral to educational program</td>
<td>60</td>
</tr>
<tr>
<td>Discuss benefits/risks of deceased donation</td>
<td>36</td>
</tr>
<tr>
<td>Discuss benefits/risks of living donation</td>
<td>36</td>
</tr>
</tbody>
</table>
Case study:

Results

Barriers to transplant education

- Low transplant knowledge: 55
- Other priorities: 49
- Not enough time: 36
- Poor communication from transplant community: 29
Barriers to transplant education

Who had lower odds of providing oral recommendations?

- Providers who stated other work priorities prevented education about transplant
- Providers who had difficulty educating non-English speaking patients
- Providers who had a higher percentage of female patients
Barriers to transplant education

Who had lower odds of providing intensive education?

- Providers who stated other work priorities prevented education about transplant
- Providers who had poor communication between dialysis and transplant centers
Transplant education practices and increased wait-listing rates

Who had higher odds of **providing oral recommendations?**

- Centers that had social workers with greater than the median year of experience in dialysis
- Centers that had social workers with greater than the median of transplant knowledge

Who had higher odds of **providing intense education?**

- Providers who had more transplant knowledge and more experience in dialysis
Better transplant education leads to better outcomes!
What predicts LDKT evaluation within 1 year?

- Be Caucasian
- Have PKD
- Trust Hospitals
- Better health insurance
- Be willing to get a DDKT and LDKT
- Have prior education and more knowledge about transplant
What predicts LDKT within 5 years?

- Be Caucasian
- Be willing to get a living donor transplant on day one
- Know more about transplant & living donation
Living donation decision making

More patients are in early stages for living donation, so provide:

- Educational information for patients
- Opportunities for family and friends to learn about transplant

Living donation decision-making often occurs after patients present for transplant
Better education leads to better outcomes

High quality transplant education leads to:

- 36-49% higher transplant wait-listing rates
- 25% higher donor evaluations and 22% higher LDKTs

Patients who start transplant evaluation after LDKT education are 4.3 times more likely to have an LDKT

References:
Centers that provide 3 or more of these practices have higher wait-listing rates:

- Recommend that patients learn more about transplant
- Hang transplant education posters in the waiting area
- Hand out transplant center names with phone numbers
- Provide education for potential living donors
- Have access to previous transplant recipients
- Have administrative support
- Take time to educate
- Have employees who know more about transplant
- Have detailed discussions about transplant and living donation
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Questions?